

**I. AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

Claims 1-14. (cancelled)

Claim 15. (currently amended) A method of treating a mammal having metabolic abnormalities resulting from insulin resistance comprising administering an effective amount of at least one polymethoxyflavone compound to reduce serum insulin levels by at least about 26%.

Claim 16. (original) The method of claim 15 wherein said polymethoxyflavone is chosen from sinensetin, nobilten, tangeretin, heptamethoxyflavone, tetramethylscutellarein and mixtures thereof.

Claim 17. (currently amended) The method of claim 15, wherein said polymethoxyflavone is tangeretin.

Claim 16. (original) The method of claim 15 wherein said polymethoxyflavone is chosen from sinensetin, nobilten, tangeretin, heptamethoxyflavone, tetramethylscutellarein and mixtures thereof.

Claim 17. (original) The method of 15 wherein said polymethoxyflavone is tangeretin.

Claim 18. (original) The method of claim 15 wherein said at least one polymethoxyflavone comprises a mixture of various polymethoxyflavone compounds.

Claim 19. (original) The method of claim 18 wherein said mixture comprises sinensetin, nobilten, tangeretin, heptamethoxyflavone, and tetramethylscutellarein.

Claim 20. (original) The method of claim 15 wherein said at least one polymethoxyflavone is administered by a means chosen from oral, transdermal, rectal, intravenous, intramuscular, intraperitoneal subcutaneous, topical, or by inhalation.

Claim 21. (original) The method of claim 15 wherein said at least one polymethoxyflavone is administered orally.

Claim 22. (original) The method of claim 15 wherein said at least one polymethoxyflavone is administered to said mammal in an amount of up to 5000 mg/day.

Claim 23. (original) The method of claim 22 wherein said at least one polymethoxyflavone is administered to said mammal in an amount of up to 70 mg/kg/day, based on the weight of said mammal.

Claim 24. (new) A method of treating a mammal having metabolic abnormalities resulting from insulin resistance comprising administering an effective amount of a mixture of polymethoxyflavone compounds, wherein said mixture comprises sinensetin, nobilten, tangeretin, heptamethoxyflavone, and tetramethylscutellarein.